

ABOUT PAPs

Q What are PAPs?

A Processed Animal Proteins (PAPs), pronounced P-A-P are made from animal by-products (ABPs) of meat production. These are parts of the animals that are not consumed by humans. PAPs come from healthy slaughtered animals fit for human consumption. Sourcing and quality are veterinary controlled to ensure safety.

Q Where are PAPs used?

A PAPs have a multitude of applications. Thanks to the excellent nutritional value of the protein. PAPs can be used in aquafeed, animal feed and pet food.

Q Are PAPs safe for animals to eat?

A Yes, PAPs are made from Category 3 animal by-products that originate from healthy animals. All Category 3 material is classed as fit for human consumption at the point of slaughter. Sourcing and processing PAPs is always under veterinary control to ensure safety all the way along the supply chain. Pets, carnivorous or omnivorous fish such as salmon or shrimps, and omnivorous animals – pigs and poultry – require a diet with rich protein sources to thrive.

Q Is it natural for animals to eat PAPs?

A Yes, for many animals it is. Animals that eat meat wholly or as part of their natural diet benefit from a rich source of protein in their diets which helps them to develop, grow and be healthy.

ABOUT LEGAL RULES AND REGULATIONS

EU

Q What rules are there on using PAPs in the EU?

A Regulation is made by the EU. Regulations [1069/2009](#) and [142/2011](#) set out health rules concerning animal by-products not intended for human consumption. Regulation 999/2001 sets rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies. You can read a summary of the legislation on the [EFPRA website](#).

Q What were the changes to the rules on using PAPs in the EU in 2021?

A Legislation effective from September 2021 permits PAPs from pigs to be used in poultry feed and PAPs from poultry to be used in pig feed.

Q Why did the European Commission decide to change the regulations on PAPs in 2021?

A The European Commission and Member States have always stated that measures for the eradication of BSE must be regularly evaluated and adapted due to risk and new control tools. European Animal By-products Regulation state that PAPs must be safely sourced and produced. The industry has installed a range of innovations and quality control systems to guarantee product quality and safety. A positive side effect is that the revised regulations can contribute to a circular economy and the EU Green Deal.

Sustainable: Using PAP's helps to build a circular economy in Europe and contributes to the Green Deal. Safe animal by-products will not go to waste. European feed producers and farmers are less dependent on alternatives such as imported soy.

Safe: PAPs are safely sourced and processed from safe category 3 animal by-products. Modern tracking, tracing and quality control systems (HACCP) ensure safety at every stage. On top of this, sourcing, transporting and processing PAPs are under full veterinary control.

Healthy: The nutritional rich ingredients contribute to the development, growth and health of livestock and thus are contributing to animal welfare.

UK

Q What rules are there on using PAPs in the UK?

A Regulation concerning animal by-products is retained EU legislation which was carried over into UK law following Brexit. Regulation [1069/2009](#) and [142/2011](#) set out health rules concerning animal by-products not intended for human consumption. Regulation [999/2001](#) sets rules for the prevention, control and eradication of certain transmissible spongiform encephalopathies. The rules which prevent the feeding of PAPs to farm animals is often referred to as the 'feed ban'.

Q What are the proposed changes to the UK rules on using PAPs?

A There is currently a consultation about amending the UK feed ban to allow poultry PAPs to be used in pig feed, and porcine PAPs to be used in poultry feed. A similar amendment was successfully made to EU legislation in 2021. Bringing UK legislation in line will create a level playing field for UK farmers, renderers and other parts of the animal feed chain.

Q Why is the UK government considering changing the regulations on PAPs?

A Measures for the eradication of BSE must be regularly evaluated and adapted due to risk and new control tools. The industry has installed a range of innovations and quality control systems to guarantee product quality and safety.

Sustainable: Using PAP's helps to build a circular economy in Europe. Safe animal by-products will not go to waste. European feed producers and farmers are less dependent on alternatives such as imported soy.

Safe: PAPs are safely sourced and processed from safe category 3 animal by-products. Modern tracking, tracing and quality control systems (HACCP) ensure safety at every stage. On top of this, sourcing, transporting and processing PAPs are under full veterinary control.

Healthy: The nutritional rich ingredients contribute to the development, growth and health of livestock and thus are contributing to animal welfare.

Q Changes in regulation are a 'slippery slope', how do we know that intra-species consumption won't be allowed next and then feeding to cows and sheep?

A The rules prohibiting PAPs in ruminant diets and intra-species consumption will not change. Rules may only change to allow additional types of PAPs to be used in pig, poultry and aquafeed as and when this is proven to be safe.

ABOUT PAP PRODUCERS

Q How can we trust that PAP producers, feed producers and farmers are following the rules?

A In the meat supply chain various types of quality control, tracking and tracing systems are in place. These are audited by independent authorities. National Competent Authorities regularly inspect production facilities.

Q Why should we trust you?

A As an industry, we recognize that trust in our products is essential. Without trust our industry cannot exist in the long run. Consumers need to know their food and the feed for animals are safe. We are guided by a scientific approach to production and safety using technology and testing to ensure our products meet the high standard required.

Q Is the change in regulation simply about profitability for producers?

A Developing higher value markets for PAPs reflects a wider move to a more sustainable, circular economy as well as being a business opportunity. Using all the parts and pieces of an animal without wasting valuable materials is inherently more sustainable. Using these materials as high value feed contributes to building a circular economy which is beneficial for everyone.

Q Do rendering companies have dedicated plants or specific processing lines in place to produce PAPs?

A Every company can decide if they want to produce and offer PAPs and how they will implement the EU or UK regulations for processing which require segregated facilities for producing PAPs. Competent authorities have to approve the production facilities.

CONSUMERS

Q How will I know if meat in the shop has been fed PAPs?

A. PAPs are excellent feed ingredients. They comprise a small number of the nearly 2000 ingredients available to use in compound feed. Retailers decide on the specification of their meat products including feed and welfare standards to reflect the demands and expectations of their customers.

Q Will it affect the price of meat in the shops?

A PAPs are one of many feed ingredients. Using it in animal production will not make any appreciable difference in consumer meat prices one way or the other.

Q Are PAPs environmentally friendly?

A Reusing PAPs means that the whole animal is used not just the parts we like to eat as meat. Using PAPs in feed helps create a circular economy which reduces environmental damage from greenhouse gas emissions and land-use change for cultivated protein sources like soy.

Q Does the use of PAPs comply to Halal standards?**How do I know that I am not eating pork, when consuming chicken?**

A Poultry feed may contain 5–10% PAPs derived from pigs, which is digested by the bird and used for its own growth and development. Poultry producers have full control over which ingredients are used in feed to meet the needs of their customers. Halal certification schemes ensure meat is reared and slaughtered according to Islamic principles.

Q Do you have contacts with retailers which have specific requirements in their specifications?

A EFPRA has general information available. Retailers can contact their specific suppliers if they have additional questions. For the specific requirement of retailers, you can check with the association for the compound feed industry and / or the meat industry in your country.

FEED VALUE AND AVAILABILITY**Q Which products are allowed in the market once the feed ban is lifted?**

A Poultry PAPs and porcine PAPs were already available for pet food and aquafeed, they now have a wider approval and can be used in specific livestock diets: poultry PAPs in pig diets, and porcine PAPs in poultry diets.

Q What is the available volume of PAPs for the feed industry?

A PAPs volumes depend on animal slaughter volumes and raw material availability. So higher volumes of PAPs in Europe and the UK market won't be possible unless there is a dramatic increase in slaughter rates. This isn't expected.

Q Can we calculate with the digestibility and composition of the PAPs as they were before the feed ban came into effect?

A It is advised to use new scientific data. Before the feed ban the composition and processing was different. Based on actual scientific research, there are average numbers available. You will find this information in our [white papers](#) and in research reports. For additional specific information please contact a supplier.

Q Do you have digestibility information available to be able to create calculation models?

A EFPRA has actual standard and average numbers available. See our [white papers](#) and the research reports. For further detailed and specific information, you can contact a supplier.

Q To what extent do the animal proteins used 20 years ago (before the feed ban) differ from the PAPs available now?

A Feed grade animal proteins defined as PAPs are only made from Category 3 material, the safest type of by-products which are from healthy slaughtered animals and processed on segregated lines under strict veterinary control in line with EU and UK legislation. Before the introduction of legislation approximately 20 years' ago, material from various sources became meat and bone meal. It did not have the same high standards for sourcing and processing as the PAPs that are now available. In Europe and the UK, meat and bone meal now only refers to material from Category 1 and 2 by-products. They do not re-enter the food chain but are reused for technical purposes, mainly fuel.

Q What is the price of PAPs?

A This cannot be answered by EFPRA as every company determines its own commercial policy. Please contact a supplier.

Q How much PAP derived from pigs can poultry feed contain?

A Research suggests that the optimum inclusion rate in poultry feed is 5-10% porcine PAPs. This is digested by the bird and used for its own growth and development. The actual inclusion level will be determined by linear programming.

Q Can poultry oil and pork fat be used as well?

A Rendered animal fat has never been prohibited for use in feed. Pork fat, poultry oil and fat of mixed animal species, all produced exclusively from rendering Category 3 materials. They are a well acknowledged feed ingredient and their use is completely independent from changes to the feed ban for proteins.

Animal Safety

Q. Wasn't Mad Cow Disease (BSE) caused by cows eating feed containing other animals?

A Mad Cow Disease was the most well-known transmissible spongiform encephalopathy (TSE). The disease was a problem 20–30 Years ago. It was caused by the intra-species consumption of the brain and spinal column which is now classified as specified risk material. The contemporary animal protein industry has a wide range of measures and quality systems in place to produce safe ingredients for compound feed.

Q How do you prevent BSE happening again?

A The rendering industry takes a range of measures to do this:

1. PAPs are made from safe Category 3 animal by-products originating from healthy slaughtered animals. There is veterinary oversight of the entire reprocessing chain.
2. Producers use segregated processing lines to avoid cross contamination (intra-species contact and material of different risk categories). All processing methods guarantee safe products at the highest level.
3. PAPs are only approved for omnivorous and carnivorous animals. PAPs are not used to feed ruminants such as sheep and cows
4. PAPs are safe. Production processes are carried out under strict supervision of quality management systems and controls. Audits are executed on a regular basis.
5. PAP producers follow stringent legislation which ensures livestock and consumers have healthy feed and food. National competent authorities regularly inspect facilities producing PAPs.

Q Are PAPs just a new name for meat and bone meal (MBM)?

A PAPs are made only from Category 3 material, the safest type of by-products which are from healthy slaughtered animals and processed on segregated lines under strict veterinary control in line with EU / UK legislation.

Before the introduction of legislation approximately 20 years' ago, there were no categories for animal by-products. Material from various sources became meat and bone meal. It did not have the same high standards for sourcing and processing as the PAPs that are now available.

The term meat and bone meal is still used in the animal by-products industry. In Europe and the UK, meat and bone meal only refers to material from Category 1 and 2 by-products. They do not re-enter the food chain but are reused for technical purposes, mainly fuel.

Outside Europe and the UK, legislation is different, meat and bone meal can still refer to material from a range of sources.